

REMARKS

Claims 1-137 are present in this application and have been subjected to restriction by the Examiner under 35 U.S.C. §121 (37 C.F.R. §1.142) as follows:

Group I, Claims 1-4, 7-17, 25, 28-44, 46-47, 49-50, 52-53, 79-81, 86-87, 90-92, 95-101, and 103-137 drawn to a method for stimulating root growth or enhancing the formation of lateral or adventitious roots, comprising expression of a nucleic acid encoding a plant cytokinin oxidase, an isolated nucleic acid encoding a plant protein having cytokinin oxidase activity or vector and host cell transformed therewith; a method for increasing the size of the root meristem, a method for altering leaf senescence, a method of increasing leaf thickness, a method for reducing vessel size, a method for improving standability of seedlings, a method for increasing branching, a method of increasing seed size or weight, a method for increasing embryo size or weight, a method of increasing cotyledon size or weight, comprising expression of a nucleic acid of claim 3 or 4, classified in class 800, subclass 290 for example.

Group II, Claims 5-6, drawn to a probe, classified in class 536, subclass 24.3 for example.

Group III, Claims 18-22, 26-27, 82-83, drawn to an isolated polypeptide and method for the production of an altered plant comprising introduction of polypeptide into a plant, classified in class 530, subclass 370 for example.

Group IV, Claims 23-24, 84-85, drawn to an antibody, classified in class 424, subclass 130.1 for example.

Group V, Claims 1-2, 45, 48, 51, 54, drawn to a method for altering root geotropism, classified in class 435, subclass 468 for example.

Group VI, Claims 55-78, 102, drawn to methods for identifying and obtaining proteins or compounds interacting with a polypeptide, classified in class 530, subclass 412 for example.

Group VII, Claims 88-89, 93, drawn to a method for increasing the size of the shoot meristem and increasing vessel size comprising downregulation of expression of a nucleic acid

encoding a plant protein having cytokinin oxidase activity, classified in class 800, subclass 285 for example.

Group VIII, Claim 94, drawn to a method for inducing parthenocarpy comprising expression of a nucleic acid encoding a plant protein having cytokinin oxidase activity in the placenta, and ovules, classified in class 800, subclass 287 for example.

The Examiner has also requested that If Applicant elects Group I, one DNA sequence and one corresponding amino acid sequence that is encoded by the DNA sequence (recited in claims 2 and 3) also be elected. Similarly, the Examiner has requested that if Applicant elects Groups II or III, one DNA sequence and one corresponding amino acid sequence that is encoded by the DNA sequence (recited in claim 3) also be elected. If Applicant elects Group V, Applicant is also requested to elect one DNA sequence and one corresponding amino acid sequence encoded by the DNA sequence as specified in claims 2 and 3. If Groups VII or VIII are elected, one DNA sequence and one corresponding amino acid sequence is also to be elected from the list of sequences in claim 3.

In support of the present restriction requirement, the Examiner has alleged that the subject matter defined by the claims of the present invention represents distinct inventions. For example, citing MPEP §803.04 and 2434, the Examiner's position is that absent evidence to the contrary, each nucleotide and amino acid sequence is presumed to represent an independent and distinct invention.

As indicated, and in order to be fully responsive to the Examiner's requirement for restriction, Applicants provisionally elect to prosecute the subject matter of Group I, Claims 1-4, 7-17, 25, 28-44, 46-47, 49-50, 52-53, 79-81, 86-87, 90-92, 95-101 and 103-137, and reserve the right to file one or more divisional applications directed to the non-

elected subject matter in this application. Further, Applicants elect with traverse, the AtCKX2 cDNA having the sequence set forth in SEQ ID NO:26 and the AtCKX2 protein sequence having the sequence set forth in SEQ ID NO:4 as the recited nucleic acid molecule and protein, respectively, in these claims.

However, pursuant to 37 C.F. R. § 1.111 and § 1.143, Applicants hereby traverse the Examiner's requirement for restriction and request reconsideration thereof for the following reasons.

An Examiner's authority to require restriction is defined and limited by statute:

If two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions.

35 U.S.C. 121, first sentence (emphasis added).

The implementing regulations of the Patent and Trademark Office include the mandate that restriction is appropriate only in cases presenting inventions which are both independent and distinct, 37 C.F.R. §§1.141-142. Without independent and distinctness, a restriction requirement is unauthorized.

The Examiner has stated on page 4 that each sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. §121 and 37 C.F.R. §1.141 et seq., stating "[t]his requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention." Office Action of February 17, 2004, page 4.

Applicants respectfully direct the Examiner to MPEP §803.04 which provides in relevant part:

Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. §121. Absent evidence to the contrary, each such nucleotide sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. §121 and 37 C.F.R. §1.141 *et seq.* **Nevertheless, to further aid the biotechnology industry in protecting its intellectual property without creating an undue burden on the Office, the Commissioner has decided *sua sponte* to partially waive the requirements of 37 C.F.R. §1.141 *et seq.* and permit a reasonable number of such nucleotide sequences to be claimed in a single application. See Examination of Patent Applications Containing Nucleotide Sequences, 1192 O.G. 68 (November 19, 1996).**

It has been determined that normally ten sequences constitute a reasonable number for examination purposes. Accordingly, in most cases, up to ten independent and distinct nucleotide sequences will be examined in a single application without restriction. In addition to the specifically selected sequences, those sequences which are patentably indistinct from the selected sequences will also be examined. Furthermore, nucleotide sequences encoding the same protein are not considered to be independent and distinct inventions and will continue to be examined together.

MPEP §803.04 (Emphasis added).

Thus, Applicants respectfully request that the Examiner reconsider the requirement for election of one nucleotide sequence and one corresponding amino acid sequence for continued prosecution in this application.

The courts have recognized that it is in the public interest to permit applicants to claim several aspects of their invention together in one application, as the Applicants have done herein. The CCPA has observed:

We believe the constitutional purpose of the patent system is promoted by encouraging applicants to claim, and therefore to describe in the manner required by 35 U.S.C. § 112 all aspects as to what they regard as their invention, regardless of the number of statutory classes involved.

In re Kuehl, 456 F.2d 658, 666, 117 U.S.P.Q. 250, 256 (CCPA 1973).

This interest is consistent with the practical reality that a sufficiently detailed disclosure supporting claims to one aspect of an invention customarily is sufficient to support claims in the same application to other aspects of the invention.

Applicants respectfully submit that in view of the continued increase of official fees and the potential limitation of an applicant's financial resources, a practice which arbitrarily imposes restriction requirements may become prohibitive and thereby contravene the constitutional purpose to promote and encourage the progress of science and the useful arts. Moreover, under the regulatory changes as a consequence of the General Agreement on Trade and Tariffs (GATT), Applicants are required to conduct simultaneous prosecution, as here, requiring excessive filing costs or a compromise of the term of their patent assets.

It is vital to all applicants that restriction requirements issue only with the proper statutory authorization, because patents issuing on divisional applications which are filed to prosecute claims that the Examiner held to be independent and distinct can be vulnerable to legal challenges alleging double patenting. The third sentence of 35 U.S.C. § 121, which states that a patent issuing on a parent application "shall not be used as a reference" against a divisional application or a patent issued thereon, does not provide comfort to applicants against such allegations. The Court of Appeals for the Federal Circuit has declined to hold that § 121

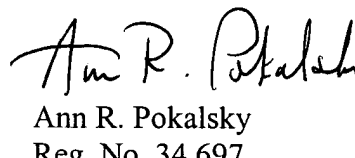
protects a patentee from an allegation of same-invention double patenting, *Studiengesellschaft Kohle mbH v. Northern Petrochemical Co.*, 784 F.2d 351, 355, 228, U.S.P.Q. 837, 840 (Fed. Cir. 1986). In *Gerber Garment Technology Inc. v. Lectra Systems Inc.*, 916 F.2d 683, 16 U.S.P.Q. 2d 436 (Fed. Cir. 1990), the Federal Circuit held that § 121 does not insulate a patentee from an allegation of "obviousness-type" double patenting, and in fact affirmed the invalidation on double patenting grounds of a patent that had issued from a divisional application filed following a restriction requirement. Furthermore, it is far from clear that the step of filing a terminal disclaimer is available to resolve a double patenting issue that arises after the issuance of a patent on the divisional application.

All these considerations indicate that the imposition of a restriction requirement with inadequate authority can lead to situations in which an applicant's legitimate patent rights are exposed to uncertainty and even extinguished. Accordingly, to protect a patentee's rights and to serve the public's interest in the legitimacy of issued patents, Applicants respectfully urge the Examiner not to require restriction in cases such as the present application wherein various aspects of a unitary invention are claimed.

MPEP §803.04 states that "nucleotide sequences encoding the same protein are not considered independent and distinct inventions and will continue to be examined together." Since the sequences recited in the claims of Group I are all directed to a plant cytokinin oxidase, i.e., nucleotide sequences encoding the same protein, it is again respectfully urged that the

Examiner reconsider and withdraw the requirement for restriction and provide an action on the merits with respect to all the sequences presently recited in the claims of Group I.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Ann R. Pokalsky".

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